

**WISE.**

No. 14,603.

PATENTED APR. 8, 1856.

*Fig. 1.*

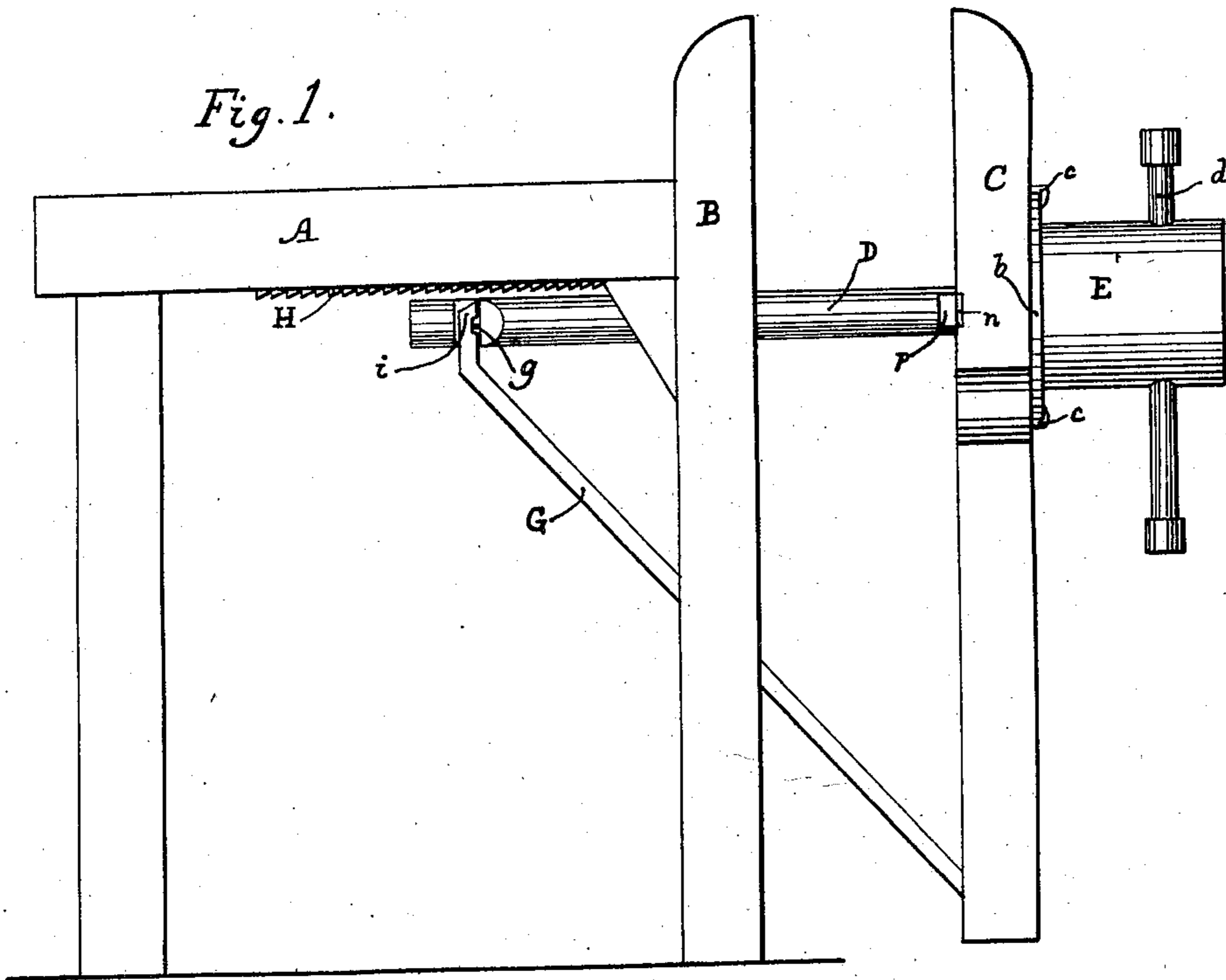
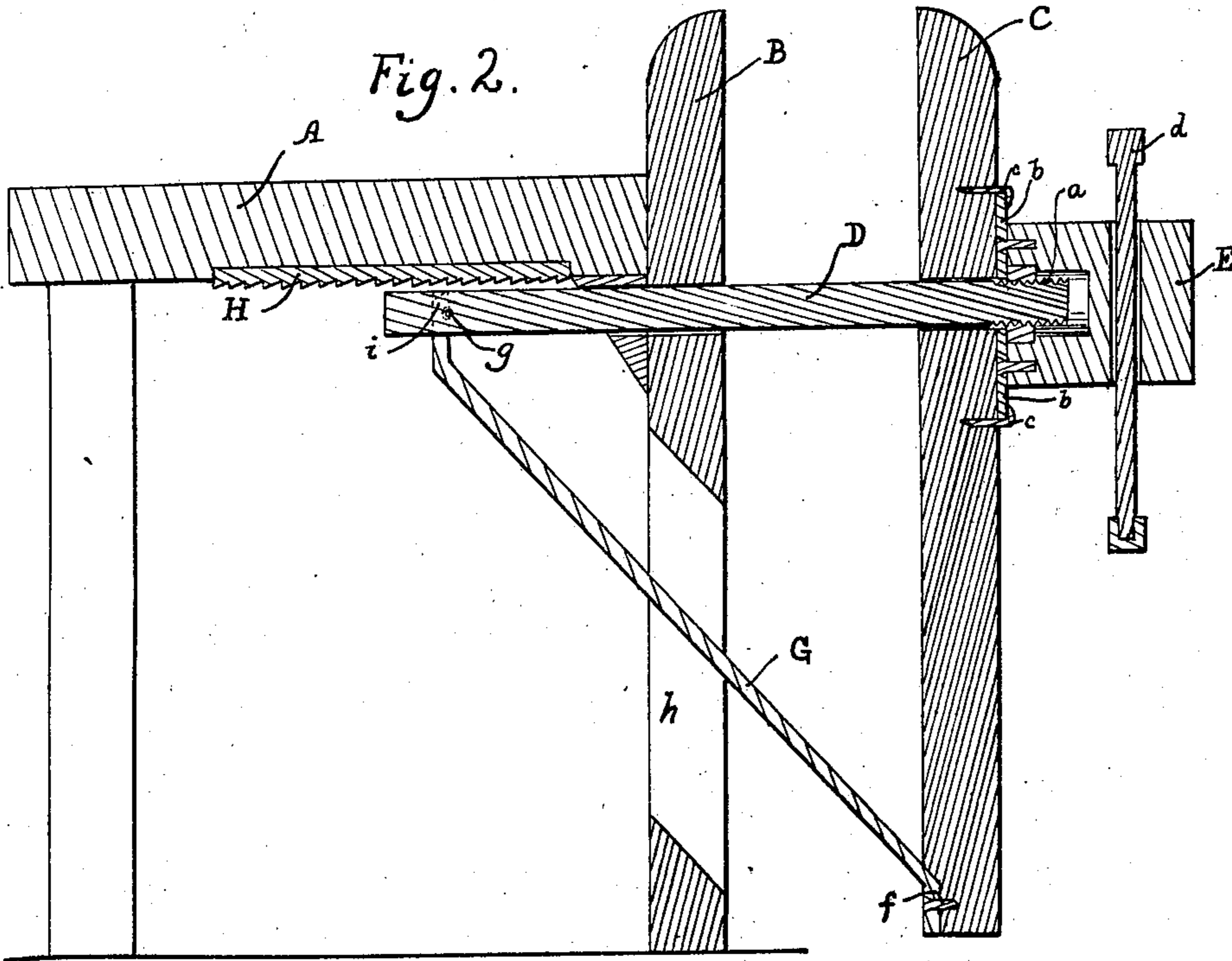
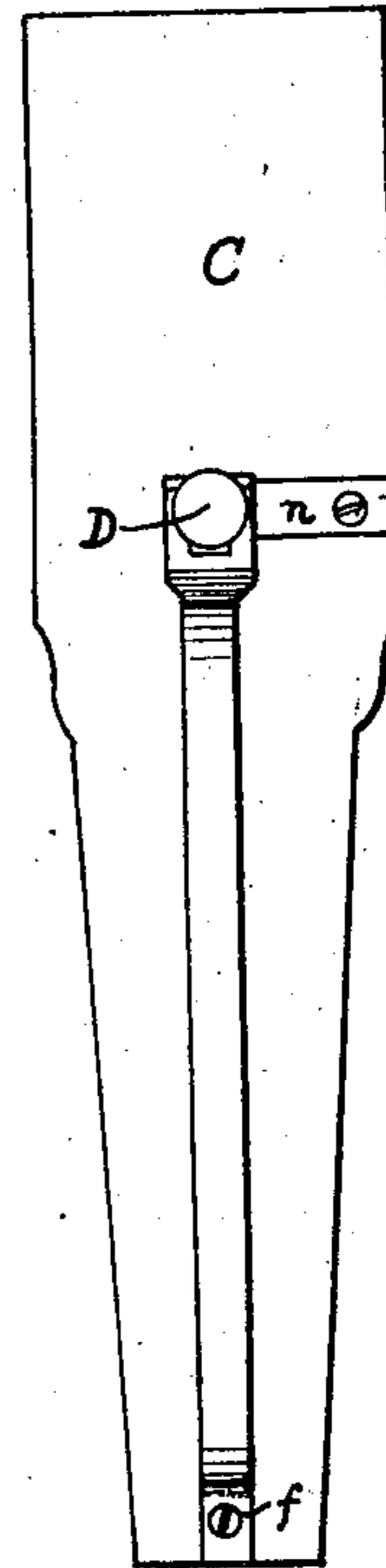


Fig. 2.



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

ORLANDO V. FLOREY, OF YELLOW SPRINGS, OHIO.

## WISE.

Specification forming part of Letters Patent No. 14,603, dated April 8, 1856; Reissued December 19, 1865, No. 2,126.

*To all whom it may concern:*

Be it known that I, O. V. FLOREY, of Yellow Springs, in the county of Greene and State of Ohio, have invented a new and Improved Vise; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, Figure 1 being a side elevation of the vise; Fig. 2, a vertical section thereof; Fig. 3, view of the inner face of the movable jaw with the sliding beam and ratchet-brace G thereon.

Like letters designate corresponding parts in all the figures.

The nature of my invention consists in the employment of a brace extending from the lower end of the movable jaw to a ratch behind the stationary jaw, arranged in such a manner that the weight of the brace will disengage it from the ratch when the jaws are not tightened against any article, and the act of pressing the movable jaw against any article will force the brace against the ratch and thus retain the jaw in that position.

The jaws may be constructed in the ordinary manner, and the stationary jaw B, secured as usual to a bench A. Behind this jaw a ratch H is secured, generally to the under side of the bench. Or it may be permanently attached to the jaw itself. A sliding beam D passes through the stationary jaw B, and also through the movable jaw C, in which it is secured by a notch *p* in the beam, and a stop *n*, on the jaw, or by any other suitable device. There is also a screw thread *a* on the outer end of the beam, on which a nut E turns. This nut is provided with a flange *b* or its equivalent turning beneath hooked projections *c, c*, or any other suitable contrivance, by which the nut is held continually in contact with the jaw. Hence when the nut is turning the beam moves in the jaw. A rigid brace G, is secured at *f*, to the lower end of the movable jaw, and extends thence, through a slot *h*, (Fig. 2,) in the stationary jaw, to the rear end of the sliding beam D; which it either embraces, or passes through, so that the beam cannot move without moving it also.

The upper end *i* of the brace, reaches up to the ratch H, and is sharpened so as to fit into the notches thereof. It has also a notch which embraces a pin *j*, passing through the beam D, to prevent the brace from falling away from the said beam. But the notch allows sufficient movement to the brace to enable it to be disengaged from, or engaged with, the notch, at pleasure. The movable jaw C, should be allowed a little angular play upon the sliding beam D, so that, when it is not pressed against any article, the weight of the brace will force the lower end of said jaw, a little out of its vertical position. This movement lowers the upper end of the brace sufficiently to disengage it from the ratch, as represented in the drawings. In this condition the movable jaw can be pushed in or out at pleasure, there being nothing to prevent a free motion thereof. Therefore, when an article is to be held in the vise, the movable jaw is drawn out sufficiently to admit the article, and then immediately pushed inward against it. The moment the upper end of the jaw strikes the article, the pressure outward against said jaw, pushes the lower end thereof inward, and thus forces the ratchet brace, into one of the notches of the ratch; and the harder the pressure against the article clamped, the greater the force which holds the brace against said ratch. The nut E is then turned by its handle *d*, till the article is tightened. To unclamp, the jaw is loosened by reversing the motion of the nut E, and the article is free.

What I claim as my invention and desire to secure by Letters Patent, is—

The use of the ratchet brace G, operating in connection with the ratch H, sliding beam D, and movable jaw C, substantially in the manner herein set forth.

The above specification of my improved vise, signed by me this 15th day of February, 1856.

O. V. FLOREY.

Witnesses:

MYRON HAIGHT,  
PETER JOHNSON.